

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
- Trade name: **BTC-20 NF**
- UFI: 1800-P0U6-S00N-TAE9
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - Identified use: intended for professional use only!
- Application of the substance / the mixture Coolant/ Cutting solution
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: ABICOR-BINZEL (UK) Ltd. Mill Lane  
Winwick Quay, Warrington WA28UA UK  
Contact Person: Kevin Chudley  
Email: kevin.chudley@binzel-abicor.co.uk  
Contact Number: 01925 653944
- Further information obtainable from: Technical Documentation
- 1.4 Emergency telephone number: Medical Emergency information in case of poisoning:  
Poison Information Center Mainz - 24 h - Phone: +49 (0) 6131 19240  
(advisory service in German or English language)

### SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008  
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
  - The product is classified and labelled according to the GB CLP regulation.
- Hazard pictograms
 



GHS08
- Signal word Warning
- Hazard-determining components of labelling: ethanediol
- Hazard statements
- Precautionary statements
  - H373 May cause damage to organs through prolonged or repeated exposure.
  - P260 Do not breathe dust/fume/gas/mist/vapours/spray.
  - P314 Get medical advice/attention if you feel unwell.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- Description: Mixture: consisting of the following components.

#### - Dangerous components:

CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28	ethanediol	STOT RE 2, H373; Acute Tox. 4, H302	25-50%
---	------------	-------------------------------------	--------

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

Trade name: **BTC-20 NF**

- Additional information:

For the wording of the listed hazard phrases refer to section 16.

(Contd. of page 1)

### SECTION 4: First aid measures

- 4.1 Description of first aid measures

- General information:

Immediately remove any clothing soiled by the product.

Do not leave affected persons unattended.

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

- After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

- After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment in case of complaints.

- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Protect unharmed eye.

- After swallowing:

Seek medical treatment.

If symptoms persist consult doctor.

- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### SECTION 5: Firefighting measures

- 5.1 Extinguishing media

- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- For safety reasons unsuitable extinguishing agents:

Water with full jet

- 5.2 Special hazards arising from the substance or mixture

CO2

Formation of toxic gases is possible during heating or in case of fire.

Nitrogen oxides (NOx)

Carbon monoxide (CO)

- 5.3 Advice for firefighters

- Protective equipment:

Do not inhale explosion gases or combustion gases.

- Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Wear protective clothing.

Avoid contact with skin and eyes

- 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Prevent from spreading (e.g. by damming-in or oil barriers).

Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

- 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

- 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

Trade name: **BTC-20 NF**

(Contd. of page 2)

- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Store in dry conditions.  
Keep container tightly sealed.  
Recommended storage temperature: 5-30 °C
- **Storage class:** 10
- **7.3 Specific end use(s):** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

#### - 8.1 Control parameters

#### - Ingredients with limit values that require monitoring at the workplace:

##### 107-21-1 ethanediol

WEL Short-term value: 104\*\* mg/m<sup>3</sup>, 40\*\* ppm  
Long-term value: 10\* 52\*\* mg/m<sup>3</sup>, 20\*\* ppm  
Sk \*particulate \*\*vapour

- **Regulatory information:** WEL: EH40/2020
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls:** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** When used properly and under normal conditions, breathing protection is not required.  
Use suitable respiratory protective device in case of insufficient ventilation.  
Filter A/P2  
Respiratory protection - Gas filters and combination filters according to (DIN EN 141)

#### - Hand protection



Protective gloves

Check protective gloves prior to each use for their proper condition.  
Only use chemical-protective gloves with CE-labelling of category III.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
After use of gloves apply skin-cleaning agents and skin cosmetics.

#### - Material of gloves

Nitrile rubber, NBR  
Recommended thickness of the material: ≥ 0.1 mm  
Penetration time (min.): < 10

#### - Penetration time of glove material

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

#### - Eye/face protection



Tightly sealed goggles

Protective goggles and facial protection - Classification according to EN 166  
protective clothing (EN 13034)

#### - Body protection:

### SECTION 9: Physical and chemical properties

#### - 9.1 Information on basic physical and chemical properties

##### - General Information

##### - Physical state

Fluid

##### - Colour:

Colourless

##### - Odour:

Characteristic

##### - Odour threshold:

Not determined.

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

Trade name: **BTC-20 NF**

(Contd. of page 3)

- Melting point/freezing point:	Undetermined.
- Boiling point or initial boiling point and boiling range	100 °C (7732-18-5 water, distilled, conductivity or of similar purity)
- Flammability	Not applicable.
- Lower and upper explosion limit	
- Lower:	3.2 Vol % (107-21-1 ethanediol)
- Upper:	53 Vol % (107-21-1 ethanediol)
- Flash point:	111 °C (107-21-1 ethanediol)
- Decomposition temperature:	Not determined.
- pH at 20 °C	6
- Viscosity:	
- Kinematic viscosity at 40 °C	8.7 mm²/s
- Dynamic at 20 °C:	13 mPas
- Solubility	
- water:	Fully miscible.
- Partition coefficient n-octanol/water (log value)	Not determined.
- Density and/or relative density	
- Density at 20 °C:	1.03 g/cm³
- Relative density	Not determined.
- Vapour density	Not determined.

- 9.2 Other information	
- Appearance:	
- Form:	Fluid
- Important information on protection of health and environment, and on safety.	
- Auto-ignition temperature:	Product is not selfigniting.
- Explosive properties:	Product does not present an explosion hazard.
- Change in condition	
- Evaporation rate	Not determined.

- Information with regard to physical hazard classes	
- Explosives	Void
- Flammable gases	Void
- Aerosols	Void
- Oxidising gases	Void
- Gases under pressure	Void
- Flammable liquids	Void
- Flammable solids	Void
- Self-reactive substances and mixtures	Void
- Pyrophoric liquids	Void
- Pyrophoric solids	Void
- Self-heating substances and mixtures	Void
- Substances and mixtures, which emit flammable gases in contact with water	Void
- Oxidising liquids	Void
- Oxidising solids	Void

(Contd. on page 5)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

Trade name: **BTC-20 NF**

(Contd. of page 4)

- Organic peroxides	Void
- Corrosive to metals	Void
- Desensitised explosives	Void
- Other safety characteristics	
- Conductivity	<4 uS

## SECTION 10: Stability and reactivity

- 10.1 Reactivity	No further relevant information available.
- 10.2 Chemical stability	
- Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions	No dangerous reactions known.
- 10.4 Conditions to avoid	No further relevant information available.
- 10.5 Incompatible materials:	No further relevant information available.
- 10.6 Hazardous decomposition products:	No dangerous decomposition products known.

## SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
- Acute toxicity	Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:	
<b>107-21-1 ethanediol</b>	
Oral	LD50 7,712 mg/kg (rat) LDLo ~1,600 mg/kg (human) ((EU))
Dermal	LD50 >3,500 mg/kg (mouse) 9,530 mg/kg (rabbit) LC50 >2.5 mg/l (rat) (6h; as aerosol)
- Skin corrosion/irritation	Based on available data, the classification criteria are not met.
- Serious eye damage/irritation	Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
- Germ cell mutagenicity	Based on available data, the classification criteria are not met.
- Carcinogenicity	Based on available data, the classification criteria are not met.
- Reproductive toxicity	Based on available data, the classification criteria are not met.
- STOT-single exposure	Based on available data, the classification criteria are not met.
- STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
- Aspiration hazard	Based on available data, the classification criteria are not met.
- 11.2 Information on other hazards	
- Endocrine disrupting properties	
	None of the ingredients is listed.

## SECTION 12: Ecological information

- 12.1 Toxicity	
- Aquatic toxicity:	
<b>107-21-1 ethanediol</b>	
EC20	>1,995 mg/l (Belebtschlamm) (0,5h; ISO 8192)
EC50	>10,000 mg/l (ALGAE) >100 mg/l (Daphnia magna) (48h; OECD 202) 6,500-13,000 mg/l (Selenastrum capricornutum) (96h)
NOEC	8,590 mg/l (Ceriodaphnia dubia) (7d)
LC50	18,000 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96h) 72,860 mg/l (Pimephales promelas) (96h; static test)
NOEC	15,380 mg/l (Pimephales promelas) (7d)
- 12.2 Persistence and degradability	No further relevant information available.

(Contd. on page 6)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

Trade name: **BTC-20 NF**

(Contd. of page 5)

- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- Additional ecological information:
- General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

### SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Disposal according to official regulations
- European waste catalogue
- 14 06 03\* other solvents and solvent mixtures
- 15 01 02 plastic packaging
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- 14.1 UN number or ID number
- ADR, ADN, IMDG, IATA Void
- 14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA Void
- 14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA
- Class Void
- 14.4 Packing group
- ADR, IMDG, IATA Void
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 Special precautions for user Not applicable.
- 14.7 Maritime transport in bulk according to IMO instruments Not applicable.
- UN "Model Regulation": Void

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
- None of the ingredients is listed.
- REGULATION (EU) 2019/1148
- Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
- None of the ingredients is listed.
- Annex II - REPORTABLE EXPLOSIVES PRECURSORS
- None of the ingredients is listed.

(Contd. on page 7)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

Version number 5 (replaces version 4)

Revision: 18.11.2022

Trade name: **BTC-20 NF**

(Contd. of page 6)

### - Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

### - Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

### - 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The safety data sheet issued is also compliant with the regulation Annex I of Regulation (EU) no. 453/2010 and Annex II of Regulation (EU) no. 2020/878.

### - Relevant phrases

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

### - Department issuing SDS:

Technical Documentation

### - Contact:

Technical Documentation

### - Date of previous version:

29.11.2021

### - Version number of previous version:

4

### - Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

### - Sources

- [www.echa.europa.eu](http://www.echa.europa.eu)

- [www.baua.de](http://www.baua.de)

IFA: Institute für Occupational Safety and Health of the German Social Accident Insurance:

- [www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index.jsp](http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index.jsp)

- [www.dguv.de/ifa/gestis/gestis-dnel-liste](http://www.dguv.de/ifa/gestis/gestis-dnel-liste)

- \* Data compared to the previous version altered.